

Be Sewer Smart

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Do you know that October is the start of the Sewer Smart Months in some Bay Area cities? For seven years, ABAG, the Association of Bay Area Governments, has declared October through April (rainy season) to be the Sewer Smart Months. Annually, ABAG kicks off the Sewer Smart campaign in late September with its annual Sewer Smart Summit to educate municipal agencies and homeowners of the risk of sewer back-up damages during the rainy season. Even though the City's sanitary sewer (commonly known as the "sewer") system is separate from the storm sewer system, a portion of rain and ground water inadvertently makes it into the sewer system. To help you to be "sewer smart," the attached diagram and information, which were generated by DOT, ESD and PW staffs, provides some helpful tips on preventing sewer back-ups. Want to be "sewer smarter"? Here are some facts about the City of San José sewer system:

- 1) It consists of approximately 2,250 miles of sewer mains.
- 2) It's a network of pipes ranging from 6 to 90 inches in diameter.
- 3) Roughly 60 percent of this pipe network is 6 inches in diameter
- 4) Due to our topography, most of the sewer system is gravity pipes, only 7.5 miles of force mains and 15 pump stations.
- 5) Nearly 50 percent of the pipes was built between the 1960s and 1980s.
- 6) Majority of the sewer spills are caused by grease in the system.
- 7) The sewer system serves over 300,000 residences, over 9,000 commercial and over 1,000 industrial buildings.
- 8) The first sewer system was constructed in 1880 as a combined (storm and sanitary) system and made of brick and redwood to serve a projected population of 10,000 people.
- 9) The town of Willow Glen voted to be incorporated into San José in 1936 because of the benefits this sewer system provided (versus individual septic system that the residents relied on).
- 10) Last but not least, the Santa Clara/San José (Wastewater) Treatment Plant experiences the highest (sewage) flows into the Plant during ... NFL Super Bowl half-time.

OK, the last point may be a joke but it is not a joking matter when it comes to sewer back-ups. It can cause havoc to your life. The City's Department of Transportation (DOT) maintains the sewer system. If your house is an older model, chances are you don't have an approved lateral

PREVENTING SEWER BACKUPS

The City of San José is interested in working with residents and tenants to keep the sanitary sewer system flowing and functioning properly. Together, we can reduce sewer line blockages and sewer backups into homes and businesses, and reduce the amount of personal property damage, disruption, and costly repairs.

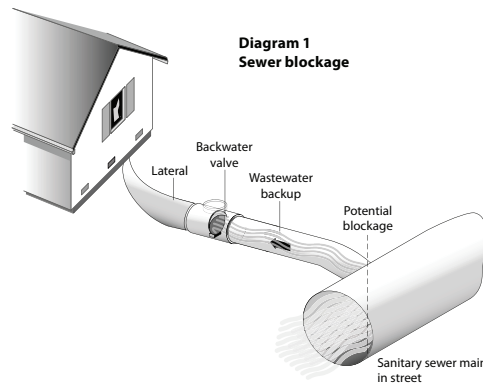
Property owners and tenants can prevent most backups and blockages by following these steps:

1 Do not pour grease down the drain

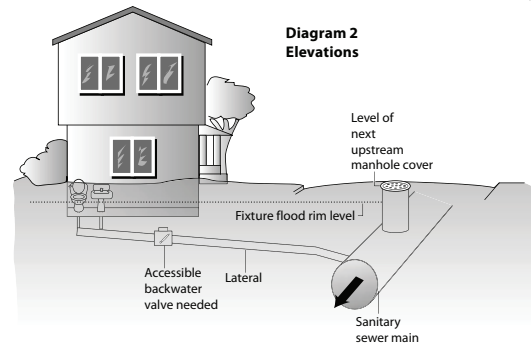
- Most blockages are caused by cooking grease that hardens in the sewer pipes and creates a plug. Do not pour cooking grease, fats or oils down the sink drain – hot water will not melt fat away. Instead, scrape fats, oils and grease from plates and pans into a covered container and put it in the trash. If necessary, store it in the refrigerator until garbage collection day.
- Put food scraps in the garbage, or compost them to reduce the amount of garbage in your cart. Use the garbage disposal sparingly.

2 Do not plant trees or large shrubs near sewer lines

- Roots grow toward breaks and cracks in search of a water source. If roots get inside the pipes, they often form "root balls" that clog the line.



If a sewer blockage occurs in the sewer main shown above, a properly working backwater valve can help prevent a backup of wastewater into the property.



3 Inspect "backwater valves" annually

- A backwater valve is a plumbing fixture that acts as one-way stopper. It allows wastewater to leave your property, but prevents it from coming back in when there is a blockage in the sewer line (see Diagram 1).
- If your home has one, it will be located somewhere along the private sewer pipe, or sewer lateral, that extends from your home or building to the main City sewer line in the street. Property owners are responsible for maintaining adequate sewage flow to and through this lateral to the City's sewer main.
- Look for the concrete box or small vault containing the backwater valve (it may be buried a foot or more deep), open the cover, and determine whether you can easily move the flapper. If the backwater valve is obstructed, you will need to free it up. A licensed plumber can help you perform this inspection as well as clean your sewer lines.

4 Install a backwater valve

- Homes built before the current plumbing codes may not have this device. Although most buildings in San Jose do not need a valve, yours may. To check, first locate the nearest upstream manhole cover for the public sewer.
- If the overflow rim of any plumbing fixture in your building (toilet, shower, tub, sink, etc.) is lower than the elevation of that manhole cover, you may need to install a valve (see Diagram 2).
- A licensed plumber can help you determine elevations. If a valve is needed, the installation will require a City permit.

5 Contact the City to report problems or seek advice

- To report sanitary sewer back-ups into dwellings or the street, call the Department of Transportation at (408) 277-4373 at any hour. Staff is available day and night to check the main sewer line. If it is clear and flowing, but a blockage is in the lateral, the property owner will then need to call a plumber to clear the line.
- To help determine whether you need a backwater valve, contact your plumber.
- If you still need help, then please visit the Building Division's website at www.sanjoseca.gov/building, which provides information in English, Spanish and Vietnamese. On the right side of the page, select the special program labeled "New! Backwater Valves." This site also provides additional information about a property owner's responsibilities regarding sanitary sewer laterals. For those without website access, call (408) 535-3555

clean-out. Without one, when there is a back-up, DOT cannot assist you in investigating the cause(s). In addition, the City's Municipal Code requires homeowners to maintain their own lateral (the pipe which carries sewage from the house to the City's main located in the street). For more information regarding lateral maintenance and clean-outs, visit the following website:

http://www.sanjoseca.gov/transportation/sewer_sewercleaning.htm

Hope these tips are helpful (if nothing else, they can be a conversation starter during this season's Super Bowl parties). Be Sewer Smart!